

Instructions for Use

CRITERION™ DEXTROSE BROTH

Cat. no. C5600	CRITERION™ Dextrose Broth	46gm
Cat. no. C5601	CRITERION™ Dextrose Broth	500gm
Cat. no. C5602	CRITERION™ Dextrose Broth	2kg
Cat. no. C5603	CRITERION™ Dextrose Broth	10kg
Cat. no. C5604	CRITERION™ Dextrose Broth	50kg

INTENDED USE

Hardy Diagnostics CRITERION™ Dextrose Broth is recommended for the cultivation of fastidious microorganisms and for the detection of gas from enteric bacilli.

This dehydrated culture medium is a raw material intended to be used in the making of prepared media products, which will require further processing, additional ingredients, or supplements.

SUMMARY

CRITERION™ Dextrose Broth is used for the isolation of fastidious organisms and specimens containing a low inoculum due to its highly nutritious formula. Dextrose Broth, with the addition of 0.1-0.2% agar, can facilitate anaerobic growth and aids in dispersion of reducing substances and CO₂ formed in the environment⁽¹⁾ This low concentration of agar allows for aerobic growth in the clear upper zone and for microaerophilic and anaerobic growth in the lower agar zones. Dextrose Broth is specified in the *Compendium of Methods for the Microbiological Examination of Foods*⁽²⁾

Meat peptone, beef extract and casein peptone serve as sources of carbon, nitrogen, vitamins and minerals. Dextrose serves as an energy source and sodium chloride is added to maintain the osmotic equilibrium.

FORMULA

Gram weight per liter:	23.0gm/L
Pancreatic Digest of Casein	5.0gm
Peptic Digest of Animal Tissue	5.0gm
Dextrose	5.0gm
Sodium Chloride	5.0gm
Beef Extract	3.0gm

Final pH 7.2 +/- 0.2 at 25 degrees C.

* Adjusted and/or supplemented as required to meet performance criteria.

STORAGE AND SHELF LIFE

Store the sealed bottle(s) containing dehydrated culture medium at 2-30°C. Dehydrated culture medium is very hygroscopic. Keep lid tightly sealed. Protect dehydrated culture media from moisture and light. The dehydrated culture media should be discarded if it is not free-flowing or if the color has changed from its original light tan.

Store the prepared media at 2-30°C.

The expiration date on the product label applies to the product in its intact packaging when stored as directed. The product may be used and tested up to the expiration date on the product label and incubated for the recommended incubation times as stated below.

Refer to the document "[Storage](#)" for more information.

PRECAUTIONS

This product may contain components of animal origin. Certified knowledge of the origin and/or sanitary state of the animals does not guarantee the absence of transmissible pathogenic agents. Therefore, it is recommended that these products be treated as potentially infectious, and handle observing the usual universal blood precautions. Do not ingest, inhale, or allow to come into contact with skin.

This product is for laboratory use only. It is to be used only by adequately trained and qualified laboratory personnel. Observe approved biohazard precautions and aseptic techniques. All laboratory specimens should be considered infectious and handled according to "standard precautions." Refer to the document "[Guidelines for Isolation Precautions](#)" from the Centers for Disease Control and Prevention.

For additional information regarding specific precautions for the prevention of the transmission of all infectious agents from laboratory instruments and materials, and for recommendations for the management of exposure to infectious disease, refer to CLSI document M29: *Protection of Laboratory Workers from Occupationally Acquired Infections*.

Sterilize all biohazard waste before disposal.

Refer to the document "[Precautions When Using Media](#)" for more information.

METHOD OF PREPARATION FOR DEHYDRATED CULTURE MEDIA

1. Suspend 23.0gm of the dehydrated culture media in 1 liter of distilled or deionized water.
2. Sterilize in the autoclave at 121°C. for 15 minutes.
3. Cool to 45-50°C.
4. Dispense into tubes containing durham tubes.

PROCEDURE AND INTERPRETATION OF RESULTS

For information on procedures and interpretation of results, consult listed references.

LIMITATIONS

It is recommended that biochemical, immunological, molecular, or mass spectrometry testing be performed on colonies from pure culture for complete identification.

Some formulations may require a settling period before pH testing of the prepared medium. If the pH is tested immediately after preparation and is out of specification, retest the medium after 24 hours to obtain final pH results. Always take pH reading at room temperature.

Refer to the document "[Limitations of Procedures and Warranty](#)" for more information.

MATERIALS REQUIRED BUT NOT PROVIDED

Standard microbiological supplies and equipment such as autoclaves, incinerators, and incubators, etc., are not provided.

QUALITY CONTROL

Hardy Diagnostics tests each lot of commercially manufactured media using appropriate quality control microorganisms and quality specifications as outlined on the Certificate of Analysis (CofA) and the CLSI document M22-A3 *Quality Assurance for Commercially Prepared Microbiological Culture Media*. The following microorganisms are routinely used for testing at Hardy Diagnostics:

Test Organisms	Inoculation Method*	Incubation			Results
		Time	Temperature	Atmosphere	
<i>Escherichia coli</i> ATCC® 25922	A	18-48hr	35°C	Aerobic	Growth; gas produced
<i>Staphylococcus aureus</i> ATCC® 25923	A	18-48hr	35°C	Aerobic	Growth; no gas produced
<i>Streptococcus pyogenes</i> ATCC® 19615	A	18-48hr	35°C	Aerobic	Growth; no gas produced

* Refer to the document "[Inoculation Procedures for Media QC](#)" for more information.

USER QUALITY CONTROL

Users of dehydrated culture media should perform QC testing in accordance with applicable government regulatory agencies, and in compliance with accreditation requirements. Hardy Diagnostics recommends end users check for signs of contamination and deterioration and, if dictated by laboratory quality control procedures or regulation, perform quality control testing to demonstrate growth or a positive reaction and to demonstrate inhibition or a negative reaction, if applicable. Hardy Diagnostics quality control testing is documented on the certificate of analysis (CofA) available from Hardy Diagnostics [Certificate of Analysis](#) website. In addition, refer to the following document "[Finished Product Quality Control Procedures](#)," for more information on QC or see the reference(s) for more specific information.

PHYSICAL APPEARANCE

CRITERION™ Dextrose Broth powder should appear homogeneous, free-flowing, and light tan in color. The prepared media should appear clear, and light to medium amber in color.

REFERENCES

MacFaddin, J.F. 1985. *Media for Isolation, Cultivation, Identification, Maintenance of Bacteria*, Vol. I. Williams & Wilkins, Baltimore, MD.

2. Vanderzant, C. and D.F. Splittstoesser. 1992. *Compendium of Methods for the Microbiological Examination of Food*, 3rd ed. American Public Health Association, Washington, D.C.

ATCC is a registered trademark of the American Type Culture Collection.

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[Ordering Information](#)

Distribution Centers:

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